Calendar No. 207

98TH CONGRESS
1st Session

SENATE

REPORT
No. 98–134

PUMP REPLACEMENT, ROBERT B. GRIFFITH WATER PROJECT, NEVADA

MAY 20 (legislative day, MAY 16), 1983.—Ordered to be printed

Mr. MCCLURE, from the Committee on Energy and Natural Resources, submitted the following

REPORT

[To accompany S. 818]

The Committee on Energy and Natural Resources, to which was referred the bill (S. 818) to authorize the replacement of existing pump casings in Robert B. Griffith water project pumping plants 1A and 2A (formerly the Southern Nevada water project), and for other purposes, having considered the same, reports favorably thereon without amendment and recommend that the bill do pass.

PURPOSE

As introduced, S. 818 would authorize the appropriation of $1.5 million to be used for the purchase of 12 stainless steel pump casings to replace existing pump casings at two pumping plants of the Robert B. Griffith Water Project in southern Nevada.

BACKGROUND AND NEED

The Southern Nevada Water Project was authorized by the Act of July 19, 1966 (Public Law 89–510) and is presently under construction in Clark County, Nevada. The first phase of the project was placed in operation on November 1, 1971 and can deliver up to 132,200 acre-feet of water annually from Lake Mead for municipal and industrial water use in Las Vegas, North Las Vegas, Henderson, Boulder City, and Nellis Air Force Base. The second stage, which is under construction, will provide for the delivery of an additional 166,800 acre-feet annually.

Recent operating problems indicate that the corrosive properties of Lake Mead water as well as design deficiencies will lead to premature pump failure due to erosion of the existing pump casings. Two pump

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casings have been replaced on an experimental basis by units constructed of stainless steel. Operations experience indicates that such replacement will solve the erosion problems at the remaining pumps. Should multiple pump failure occur, alternate water sources will be inadequate to serve the project area and serious shortages will result.

Of particular note is that the expense incurred by the Bureau of Reclamation would be for the pump casings only; installation and appurtenant equipment would be financed by nonfederal sources.

LEGISLATIVE HISTORY

S. 818 was introduced on March 16, 1983. A hearing was held before the Committee on Water and Power on May 2, 1983, at which time the Administration supported enactment of the bill.

A companion measure, H.R. 2146 was introduced in the House on March 16, 1983. The bill was referred to the House Committee on Interior and Insular Affairs where it is pending action before the Subcommittee on Water and Power Resources.

In the 97th Congress, a similar bill, S. 1621, was reported by the Senate Committee on Energy and Natural Resources on May 11, 1982 and was passed by the Senate on May 19, 1982. S. 1621 failed on suspension in the House on December 13, 1982.

COMMITTEE RECOMMENDATION AND TABULATION OF VOTES

The Senate Committee on Energy and Natural Resources, in open business meeting on May 13, 1983, by unanimous vote of a quorum present recommended that the Senate pass S. 818, as described herein.

The roll call vote on reporting the measure was 18 yeas and 0 nays as follows:

YEAS	NAYS
McClure	
Hatfield	
Weicker*	
Wallop	
Warner	
Murkowski	
Nickles	
Hecht	
Chafee	
Heinz*	
Johnston*	
Jackson	
Bumpers*	
Ford	
Metzenbaum*	
Matsunaga*	
Melcher	
Bradley*	

*Indicates vote by proxy.

COST AND BUDGETARY CONSIDERATION

The following estimate of costs of this measure has been provided by the Congressional Budget Office:

U.S. CONGRESS,
CONGRESSIONAL BUDGET OFFICE,
Washington, D.C., May 16, 1983.

Hon. JAMES A. MCCLURE,
Chairman, Committee on Energy and Natural Resources, U.S. Senate, Washington, D.C.

DEAR MR. CHAIRMAN: Pursuant to Section 403 of the Congressional Budget Act of 1974, the Congressional Budget Office has prepared the attached cost estimate for S. 818, a bill to authorize the replacement of existing pump casings in the Robert B. Griffith water project pumping plants 1A and 2A, (formerly the Southern Nevada water project) and for other purposes.

Should the Committee so desire, we would be pleased to provide further details on this estimate.

Sincerely,

JAMES BLUM
(For Alice M. Rivlin, Director).

CONGRESSIONAL BUDGET OFFICE—COST ESTIMATE

MAY 16, 1983.

1. Bill number: S. 818.

2. Bill title: A bill to authorize the replacement of existing pump casings in the Robert B. Griffith water project pumping plants 1A and 2A, (formerly the Southern Nevada water project) and for other purposes.

3. Bill status: As ordered reported by the Senate Committee on Energy and Natural Resources, May 13, 1983.

4. Bill purpose: This bill authorizes the Secretary of the Interior to procure twelve stainless steel pump casings for two pumping plants of the Robert B. Griffith water project, and authorizes the appropriation of funds for this purpose.

5. Estimated cost to the Federal Government:

	Millions
Estimated authorization level:	
Fiscal year:	
1984	$1.9
1985	---
1986	---
1987	---
1988	---
Estimated outlays:	
Fiscal year:	
1984	1.9
1985	---
1986	---
1987	---
1988	---

The costs of this bill fall within budget function 300.

Basis of estimate: For the purpose of this estimate it is assumed that all funds authorized will be appropriated in fiscal year 1984. The

estimated authorization level was derived by adjusting the $1.5 million (in July 1980 price levels) authorized in the bill to reflect historical and projected cost increases. Based on information from the Bureau of Reclamation, it is anticipated that all of the casings will be purchased in the year in which the funds are appropriated.

6. Estimated cost to State and local governments: None.
7. Estimate comparison: None.
8. Previous CBO estimate: None.
9. Estimate prepared by: Debbie Goldberg.
10. Estimate approved by:

C. G. NUCKOLS
(For James L. Blum,
Assistant Director for Budget Analysis).

REGULATORY IMPACT EVALUATION

In compliance with paragraph 11(b) of Rule XXVI of the Standing Rules of the Senate, the Committee makes the following evaluation of the regulatory impact which would be incurred on the passage of S. 818.

The bill is not a regulatory measure in the sense of imposing Government established standards or significant responsibilities on private individuals or businesses and little, if any, additional paperwork would result from enactment of S. 818 other than that which would normally be associated with such Federal procurement activities as authorized by the bill.

EXECUTIVE COMMUNICATIONS

The pertinent legislative reports received by the Committee from the Department of the Interior and the Office of Management and Budget setting forth Executive agency recommendations relating to S. 818 are set forth as follows:

U.S. DEPARTMENT OF THE INTERIOR,
OFFICE OF THE SECRETARY,
Washington, D.C., May 9, 1983.

Hon. JAMES A. MCCLURE,
Chairman, Committee on Energy and Natural Resources,
U.S. Senate, Washington, D.C.

DEAR MR. CHAIRMAN: This responds to your request for our views on S. 818, a bill "To authorize the replacement of existing pumping casings in the Robert B. Griffith water project pumping plants 1A and 2A, (formerly the Southern Nevada Water Project) and for other purposes."

We support enactment of S. 818.

The first section of S. 818 would authorize the Secretary of the Interior to provide for the replacement of twelve cast steel pump casings in plants 1A and 2A of the Robert B. Griffith Water Project, State 1, with twelve stainless steel casings. Section 2 would authorize the Secretary to negotiate with qualified manufacturers for the procurement of the new replacement casings. Section 3 would require the

United States to pay for the costs of the new casings and would require the State of Nevada to pay for the costs of installing the new casings. Finally, section 4 authorizes an appropriation of $1.5 million, plus indexing as appropriate, for the procurement of the replacements.

The Robert B. Griffith Water Project, Stage I, was developed by the Bureau of Reclamation. It contains fourteen horizontal centrifugal pumping units in Pumping Plants 1A and 2A. These fourteen units pump water from the Alfred Merrit Smith Water Treatment Plant near the shore of Lake Mead through project water conveyance pipelines to terminal storage facilities which feed water distribution systems serving Las Vegas, North Las Vegas, Henderson, Nellis Air Force Base, and other communities in the Las Vegas area.

The operation of the original pumps and motors at Pumping Plants 1A and 2A has been unsatisfactory. Maintenance costs have been extraordinarily excessive, and it is clear that the lifespan of the units will be significantly shorter than normal unless the units are modified.

Hitachi American, Ltd., under the Bureau of Reclamation Solicitation No. DS–6637, furnished the pumps, motors, and appurtenant equipment; the company also supervised the installation. The pumps and motors were placed in operation in 1971. In January 1973, a unit was dismantled because of the development of unusual noise. Excessive cavitation damage was found, as evidenced by holes completely through some of the pump impeller vanes. Cavitation also was found on the casing at the eye of the impeller (intake side). At that time, the unit had operated approximately 2,100 hours. Although the one-year warranty period had expired and Hitachi did not admit legal responsibility under the contract, Hitachi agreed to reshape the leading edge of the vanes in all 14 impellers, and the company contributed $18,500 as its part of the cost. The project water users assumed responsibility for the remaining costs, including the costs of dismantling and reassembling the units. After testing, it was apparent that the cavitation problem had not been solved.

Since the expiration of the warranty period, Hitachi has expended considerable effort to modify the pumps so that they would operate satisfactorily. Costs expended on the effort to obtain acceptable results from the pumps approximate $1 million by Hitachi, $300,000 by the water users, and $150,000 by Reclamation. Reclamation's costs must be repaid with interest by the water users. The combined expense of remedial measures to date far exceeds Hitachi's original bid of $693,400 for furnishing the pumps, motors, appurtenant equipment, and its supervision of the installation.

Model tests and impeller redesign since the problem was discovered in 1973 indicate that many factors were involved, such as the synchronous speed of the units (1,200 revolutions per minute), the magnitude of the suction and discharge head, the corrisive effect of the water, and the type of materials used in the casings and impellers.

Major changes that were made subsequent to installation of the original equipment include redesigned impellers, modification of the casing baffle plates, and changing the start/stop time sequencing for the pump valving. All of these measures helped diminish the magnitude of the problem, but did not totally resolve it.

In July 1979, the Bureau of Reclamation installed two stainless steel casings, fabricated by Hitachi, in a research program as a final effort

to resolve the problem. If that effort had failed to resolve the problem, the only alternative would have been to replace all of the pumps and motors with units having a synchronous speed of 900 revolutions per minute. However, the results of the research program completed in 1980 are conclusive. They show that replacement of the existing cast steel casings with stainless steel casings is an acceptable technical solution to the cavitation, corrosion, and erosion problems. The motors, shafts, and impellers will not have to be replaced if the casings are replaced.

The estimated cost of procuring the stainless steel casings is $1.5 million (July 1980 price levels). Because of the poor performance of the existing units almost from the inception of the project, the exceptionally high cost to date of maintenance, the additional costs incurred by the water users, and the participation of the State in the casing replacement, we believe that it would be appropriate to make the cost of procuring the pump casings and appurtenant parts nonreimbursable. We therefore support enactment of S. 818.

The Office of Management and Budget has advised that there is no objection to the presentation of this report from the standpoint of the Administration's program.

Sincerely,

GARREY E. CARRUTHERS,
Assistant Secretary.

EXECUTIVE OFFICE OF THE PRESIDENT,
OFFICE OF MANAGEMENT AND BUDGET,
Washington, D.C., May 9, 1983.

Hon. JAMES A. MCCLURE,
Chairman, Committee on Energy and Natural Resources,
U.S. Senate, Washington, D.C.

DEAR MR. CHAIRMAN: This is in response to your request of March 22, 1983, for the views of the Office of Management and Budget on S. 818, a bill "To authorize the replacement of existing pump casings in the Robert B. Griffith water project pumping plants 1A and 2A (formerly the Southern Nevada water project) and for other purposes."

The Office of Management and Budget concurs in the views of the Department of the Interior as expressed by Mr. Robert N. Broadbent, Commissioner of the Bureau of Reclamation, in his testimony of May 2, 1983, before the Subcommittee on Water and Power. Accordingly, we recommend enactment of S. 818.

Sincerely,

JAMES M. FREY,
Assistant Director for Legislative Reference.

CHANGES IN EXISTING LAW

In compliance with paragraph 12 of Rule XXVI of the Standing Rules of the Senate, the Committee notes that no changes in existing law are to be made by S. 818 as reported.

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Calendar No. 209

98TH CONGRESS
1st Session

SENATE

REPORT
No. 98-136

ALBEN BARKLEY NATIONAL HISTORIC SITE

MAY 20 (legislative day, MAY 16), 1983.—Ordered to be printed

Mr. MCCLURE, from the Committee on Energy and Natural Resources, submitted the following

REPORT

[To accompany S. 886]

The Committee on Energy and Natural Resources, to which was referred the bill (S. 886) to designate the Alben Barkley National Historic Site, having considered the same, reports favorably thereon with an amendment and recommends that the bill, as amended, do pass.

The amendment is as follows:

On page 2, line 10, delete "1982," and insert in lieu thereof, "1983,".

PURPOSE OF THE MEASURE

The purposes of S. 886, as reported, is to acquire certain lands near Paducah, Kentucky, and establish the Alben Barkley National Historic Site.

S. 886 authorizes the Secretary of the Interior to acquire by donation, purchase with donated or appropriated funds, or exchange the lands and buildings known as "Angles" which comprise approximately 13 acres located near Paducah, Kentucky. It further states that the Secretary should substantially complete the acquisition authorized within one year after the date of enactment of this legislation, and authorizes $700,000 for land acquisition.

BACKGROUND AND NEED

The "Angles" was constructed around 1853 by Q. Q. Quigley, one of the Midwest's most prominent 19th century citizens and has strong but not necessarily preeminent association with Alben Barkley.

Alben Barkley was a distinguished Member of Congress, having been elected to the House of Representatives in 1913 where he remained until 1927 when he was elected to the United States Senate.

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While in the Senate he was notable for his service as a majority leader from 1936 to 1947 and minority leader from 1947 to 1949. He also served as Vice President of the United States from 1949 to 1953 under President Harry S Truman.

Angles was placed on the National Register of Historic Places in 1976. The National Park Service has not done a study of the property to determine national significance.

LEGISLATIVE BACKGROUND

S. 886 was introduced by Senator Ford on March 22, 1983. A hearing on S. 2279 (similar to S. 886) before the Subcommittee on Public Lands and Reserved Water was held on July 27, 1982 in the 97th Congress. No hearings have been held in the 98th Congress.

The Administration in testimony given before the Subcommittee at the July 27 hearing opposed the enactment of S. 2279. At a business session on May 13, 1983, the Committee on Energy and Natural Resources, ordered S. 886 as amended favorably reported.

COMMITTEE RECOMMENDATIONS AND TABULATIONS OF VOTES

The Senate Committee on Energy and Natural Resources in an open business session on May 13, 1983, by a unanimous vote of a quorum present recommends that the Senate pass S. 886, with an amendment as described therein.

The rollcall vote on reporting the measure was 19 yeas and 0 nays as follows:

YEAS	NAYS
McClure	
Hatfield	
Weicker [1]	
Domenici [1]	
Wallop	
Warner	
Murkowski	
Nickles	
Hecht	
Chafee	
Heinz [1]	
Johnston [1]	
Jackson	
Bumpers [1]	
Ford	
Metzenbaum [1]	
Matsunaga [1]	
Melcher	
Bradley [1]	

[1] Indicates voted by proxy.

COMMITTEE AMENDMENT

The Committee amended S. 886 to technically correct the authorization for appropriations to the correct fiscal year.

COST AND BUDGETARY CONSIDERATIONS

The following estimate of costs of this measure has been provided by the Congressional Budget Office:

CONGRESSIONAL BUDGET OFFICE,
Washington, D.C., May 11, 1983.

Hon. JAMES A. MCCLURE,
Chairman, Committee on Energy and Natural Resources, U.S. Senate, Dirksen Senate Office Building, Washington, D.C.

DEAR MR. CHAIRMAN: Pursuant to Section 403 of the Congressional Budget Act of 1974, the Congressional Budget Office has prepared the attached cost estimate for S. 886, a bill to designate the Alben Barkley National Historic Site.

Should the Committee so desire, we would be pleased to provide further details on this estimate.

Sincerely,

ALICE M. RIVLIN, *Direcctor.*

CONGRESSIONAL BUDGET OFFICE—COST ESTIMATE

MAY 11, 1983.

1. Bill number: S. 886.
2. Bill title: A bill to designate the Alben Barkley National Historic Site.
3. Bill status: As ordered reported by the Senate Committee on Energy and Natural Resources, May 13, 1983.
4. Bill purpose: The bill authorizes the Secretary of the Interior to acquire by donation, purchase with donated or appropriated funds, or exchange, approximately 13 acres of historically significant property located near Paducah, Kentucky. The Secretary is instructed to designate such property, after acquired, as the Alben Barkley National Historic Site. The appropriation of $700,000 is authorized, effective October 1, 1983, for acquiring the land and interests therein.
5. Cost estimate:

	Millions
Authorization level:	
Fiscal year:	
1983	----
1984	$0.7
1985	----
1986	----
1987	----
Estimated outlays:	
Fiscal year:	
1983	----
1984	.7
1985	----
1986	----
1987	----

The costs of this bill fall within budget function 300.

Basis of Estimate: The authorization is that stated in the bill. For purposes of this estimate, it was assumed that this legislation will be passed and appropriations made available by early in fiscal year 1984. The outlay estimate assumes that no legal challenges will arise in the course of acquiring the specified property.

6. Estimated cost to State and local governments: None.
7. Estimate comparison: None.
8. Previous CBO estimate: None.
9. Estimate prepared by Mary Ann Curtin.
10. Estimate approved by:

C. G. NUCKOLS
(For James L. Blum,
Assistant Director for Budget Analysis).

REGULATORY IMPACT EVALUATION

In compliance with paragraph 11(b) of Rule XXVI of the Standing Rules of the Senate, the Committee makes the following evaluation of the regulatory impact which would be incurred in carrying out S. 886 as reported. S. 886 would designate the Alben Barkley National Historic Site.

The bill is not a regulatory measure in the sense of imposing government-established standards or significant economic responsibilities on private individuals and businesses.

No personal information would be collected in administering the program. Therefore, there would be no impact on personal privacy.

Little, if any, additional paperwork would result from the enactment of S. 886.

EXECUTIVE COMMUNICATIONS

On May 6, 1983, the Committee on Energy and Natural Resources requested legislative reports from the Department of the Interior and the Office of Management and Budget setting forth executive views on S. 886. These reports had not been received at the time the report on S. 886 was filed. When the reports become available, the chairman will request that they be printed in the Congressional Record for the advice of the Senate.

CHANGES IN EXISTING LAW

In compliance with paragraph 12 of Rule XXVI of the Standing Rules of the Senate, the Committee notes that no changes in existing law would be made by the bill, S. 886, as reported.

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